

In the claims:

1. (Original) A method for automatic separation of components from fluids comprising placing first and second chambers in a centrifuge, subjecting said first chamber to centrifugation, locking said chambers in first positions such that a supernatant in said first chamber drains into said second chamber, subjecting said second chamber to centrifugation, and locking said chambers in second positions for allowing a supernatant in said second chamber to transfer to another of said chambers.

2. (Original) A method according to claim 1 wherein said another of said chambers is said first chamber, said supernatant in said first chamber drains into said second chamber by gravity draining, and said supernatant in said second chamber transfers into said first chamber by centrifugal transfer.

3. (Original) A method according to claim 1 further comprising the step of freezing said supernatant in said second chamber prior to said step of subjecting said second chamber to centrifugation.

4. (Original) A method according to claim 3 further comprising thawing said supernatant and wherein said step of subjecting said second chamber to centrifugation is performed as said supernatant is thawing.

5. (Original) A method according to claim 4 wherein said another of said chambers is said first chamber, said supernatant in said first chamber drains into said second chamber by gravity draining, and said supernatant in said second chamber transfers into said first chamber by centrifugal transfer.

6. (Original) A method for separation of components of a substance comprising:

placing a first substance in a first chamber of a container having at least two separate chambers in fluid communication with each other,

rotating said container to centrifuge said first substance and separate said first substance into a first component and a second component,

locking said container in a first position that allows said first component to flow into a second chamber of said container,

rotating said container again to centrifuge said first component to produce a third component and a fourth component, and

locking said container in a second position that allows said third component to flow to said first chamber.

7. (Original) A method according to claim 6 wherein said first component drains into said second chamber by gravity.

8. (Original) A method according to claim 7 further comprising the step of centrifugally transferring said third component by rotating said container while locking said container in said second position.

9. (Original) A method according to claim 8 wherein said first substance contains blood, said first component contains plasma, and said fourth component contains fibrinogen.

10. (Original) A method according to claim 9 wherein said second chamber is supplied with a precipitating agent prior to said step of rotating said container to centrifuge said first substance.

11. (Original) A method according to claim 10 wherein said precipitating agent is PEG.

12. (Original) A method for centrifuging substances comprising: providing a removable container having a plurality of chambers for receiving substances to be centrifuged; placing one or more substances in said container; rotating said container a first time to subject said substances to centrifugation; locking said container in a first position to allow a supernatant in one of said chambers to transfer into a second of said chambers; and locking said container in a second position and rotating said container a second time to transfer a supernatant in said second chamber to said one of said chambers.

13. (Original) The method of claim 12, wherein the step of locking said container in said first position causes said supernatant in said one of said chambers to transfer substantially into said second chamber by gravity.

14. (Original) The method of claim 12, wherein the step of locking said container in said second position and rotating said container causes a supernatant in said second chamber to transfer substantially into said one of said chambers by centrifugal transferring.

15. (Original) The method of claim 12, wherein the step of locking the container in said first position comprises holding said container in said first position for a predetermined period of time.

16. (Original) The method of claim 12, wherein the step of locking the container in said first position comprises controlling the position of a movable plate.

17. (Original) The method of claim 12, further comprising controlling the locking and rotating of said

container to provide automatic multiple decanting, wherein the container is locked and/or rotated at respective intervals of predetermined duration.

18. (Original) The method of claim 12, further comprising the step of mixing said one or more substances in said container by accelerating and decelerating the rotation of the container.

19. (Original) The method of claim 12, further comprising the step of maintaining the substances in at least one chamber separate from each other with a divider.

20. (Original) The method of claim 19 wherein said divider has an opening for allowing said substances to be discharged from said at least one chamber.

21. (Original) The method of claim 12, wherein the step of placing one or more substances into said container comprises the step of placing blood in said one of said chambers and a precipitating agent in said second of said chambers, wherein the step of rotating said container a first time causes a supernatant plasma to be separated from a cellular component of said blood, and the step of locking said container in said first position causes said supernatant plasma to be substantially transferred from said one of said chambers into said second of said chambers, while substantially leaving said cellular component in said one of said chambers.

22. (Original) The method of claim 21, further comprising the step of mixing said supernatant plasma and said precipitating agent in said second chamber, and rotating said container again to cause fibrinogen and Factor XIII to be precipitated from the supernatant plasma to create a pellet in said second of said chambers.

23. (Original) The method of claim 22, wherein the step of locking and rotating said container a second time causes a supernatant resulting from said precipitation to be substantially transferred from said second chamber to said one of said chambers, thereby leaving behind said pellet in said second chamber.

24. (Original) A method for centrifuging substances comprising: providing a unitary container having a plurality of chambers therein for receiving substances to be centrifuged; placing one or more substances into said container; rotating said container a first time to subject said substances to centrifugation; locking said container in a first position to allow a supernatant to be transferred from one chamber to another chamber by gravity; locking said container in a second position and rotating said container a second time to cause a supernatant to be transferred from one chamber to another chamber by centrifugal transfer.

25. (Original) The method of claim 24, wherein the container comprises a first and a second chamber, wherein the step of placing substances within the container comprises placing one substance in the first chamber and a second substance in the second chamber.

26. (Original) The method of claim 25, wherein the step of rotating said container a first time causes a supernatant to separate from the one substance in said first chamber, wherein the step of locking the container in said first position causes the supernatant in said first chamber to be transferred by gravity into said second chamber through a passage between said first and second chambers.

27. (Original) The method of claim 26, further comprising the step of mixing said supernatant and second

substance in said second chamber by accelerating and decelerating the rotation of the container for a predetermined time, wherein said mixing helps to produce a precipitation in said second chamber.

28. (Original) The method of claim 27, further comprising rotating the container again to accelerate the formation of said precipitation in said second chamber, wherein the precipitate in said second chamber is forced to the bottom of said second chamber in the form of a pellet.

29. (Original) The method of claim 28, wherein the step of rotating the container a second time causes the supernatant resulting from said precipitation to be transferred from said second chamber to said first chamber, leaving behind the precipitation in the form of a pellet in said second chamber.

30. (Original) The method of claim 29, further comprising controlling the steps in the process to provide automatic multiple decanting which allows for activation of one or more steps in the process for a predetermined period of time.

31. (Original) The method of claim 30, wherein the step of placing one or more substances in said container comprises placing blood in said first chamber and a precipitating agent in said second chamber.

32. (Previously submitted) A method for treating physiological products, comprising:

providing a centrifuge;

providing a container having at least a first chamber and an adjacent second chamber, wherein each of the first and second chambers has a top portion, a bottom portion and a set of walls, wherein the top portions of the first

chamber and second chamber are adjacent each other and connected by a bridge for transferring fluid therebetween when said container is in a predetermined orientation;

providing a holder assembly attached to the centrifuge and effective to removably receive the container, wherein the holder assembly is effective to orient the container in said predetermined orientation; and placing a physiological product in one of said chambers.

33. (Previously submitted) The method of claim 32, wherein the chambers include lid portions, thereby forming a closed container.

34. (Previously submitted) The method of claim 33 wherein at least one of the chambers includes an access port for transference of a liquid.

35. (Currently Amended) In a method of treating physiological fluids, the improvement comprising providing a container adapted to contain said fluids during treatment, wherein said container comprises:

a first sterile chamber having a first top portion, a first bottom portion and a first set of walls;

a second sterile chamber adjacent said first sterile chamber and having a second top portion adjacent said first top portion, a second bottom portion and a second set of walls;

a bridge connecting said first top portion of the first chamber and said second top portion of the second chamber, such that a fluid can be transferred from the first chamber to the second chamber while the container is positioned at a predetermined angle, and means for sterile transfer of a fluid to or from at least one of said chambers

independently of the other of said chambers and located near the top of at least one of said chambers, and placing a physiological fluid in one of said chambers.

36. (Previously submitted) The method of claim 35, wherein the chambers include a lid portion.

37. (Cancelled)

38. (Currently amended) A method for treating physiological products and maintaining sterility of said products during said treating comprising:

providing a container having a plurality of closed, sterile fluid-receiving chambers, a bridge forming a fluid path allowing fluid communication between a first of said chambers and a second of said chambers when said container is in a predetermined orientation, and at least one access port allowing sterile access to at least one of said chambers.

providing a centrifuge having a holder removably receiving said container and allowing said container to assume a first orientation wherein a physiological product in one of said chambers is subjected to centrifugation and said predetermined orientation wherein fluid in said first of said chambers flows along said fluid path to said second of said chambers, and said centrifuge comprises a locking element that selectively holds said container in said predetermined orientation, and

placing a physiological product in one of said chambers.

39. (Previously submitted) A method according to claim 38 wherein said holder comprises a frame pivotally mounted to a rotor of said centrifuge.

40. (Currently amended) A method according to claim 38 wherein said locking element comprises a movable locking plate that is movable between free and locking positions, wherein said movable locking plate allows said container to assume said first orientation when in said free position and holds said container in said predetermined position when in said locking position.

41. (Previously submitted) A method according to claim 40 wherein said centrifuge further comprises an electromagnet for moving said locking plate to one of said locking and free positions.

42. (Currently amended) A method according to claim 38 wherein said holder comprises a frame pivotally mounted to a rotor of said centrifuge, and said locking element comprises a movable locking plate that is movable between free and locking positions, wherein said movable locking plate allows said container to assume said first orientation when in said free position and holds said container in said predetermined position when in said locking position.

43. (Currently amended) In a method of treating physiological fluids, the improvement comprising providing a container adapted to contain said fluids during treatment, wherein said container comprises a base forming a plurality of sterile chambers, each of said chambers having a bottom and a top, a bridge connecting top portions of at least two of said chambers and arranged to provide a sterile fluid channel from a first of said at least two sterile chambers to a second of said at least two sterile chambers when said container is in a predetermined orientation, a lid closing said top of each of said plurality of chambers, and an access port

near the top of at least one of said chambers that allows sterile transfer of a liquid to or from said at least one of said chambers independently of the other of said chambers from the exterior of said container to the interior of said at least one of said chambers, and placing a physiological fluid in one of said plurality of sterile chambers.

44. (Previously submitted) A method according to claim 43 wherein said plurality of sterile chambers and said bridge comprise a molded base part.

45. (Previously submitted) A method according to claim 44 wherein said container is substantially rigid.

46. (Previously submitted) A method according to claim 43 wherein said container further comprises a separation disk in one of said chambers.

47. (Previously submitted) A method according to claim 43 wherein said plurality of chambers comprise first and second adjacent chambers having adjacent sidewalls and said bridge is formed at the tops of said adjacent sidewalls.

48. (Cancelled)

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35. (Currently amended) In a method of treating physiological fluids, the improvement comprising providing a container adapted to contain said fluids during treatment, wherein said container comprises:

[at least] a first sterile chamber having a first top portion, a first bottom portion and a first set of walls;

a second sterile chamber adjacent said first sterile chamber and having a second top portion adjacent said first top portion, a second bottom portion and a second set of walls;

a bridge connecting said first top portion of the first chamber and said second top portion of the second chamber, such that a fluid can be transferred from the first chamber to the second chamber while the container is positioned at a predetermined angle, and means for sterile transfer of a fluid to or from at least one of said chambers independently of the other of said chambers and located near the top of at least one of said chambers [maintaining sterility of said first and second chambers during addition or removal of fluids to said chambers], and

placing a physiological fluid in one of said chambers.

38. (Currently amended) A method for treating physiological products and maintaining sterility of said products during said treating comprising:

providing a container having a plurality of closed, sterile fluid-receiving chambers, a bridge forming a fluid path allowing

fluid communication between a first of said chambers and a second of said chambers when said container is in a predetermined orientation, and at least one access port allowing sterile access to at least one of said chambers,

providing a centrifuge having a holder removably receiving said container and allowing said container to assume a first orientation wherein a physiological product in one of said chambers is subjected to centrifugation and said predetermined orientation wherein fluid in said first of said chambers flows along said fluid path to said second of said chambers, and said centrifuge comprises a locking element that selectively holds said container in said predetermined orientation, and placing a physiological product in one of said chambers,

40. (Currently amended) A method according to claim 38 wherein said [centrifuge further] **locking element** comprises a movable locking plate that is movable between free and locking positions, wherein said **movable locking plate** allows said container to assume said first orientation when in said free position and holds said container in said predetermined position when in said locking position.

42. (Currently amended) A method according to claim 38 wherein said holder comprises a frame pivotally mounted to a rotor of said centrifuge, and said [centrifuge further] **locking element** comprises a movable locking plate that is movable between free and locking positions, wherein said **movable locking plate** allows said container to assume said first orientation when in said free position and holds said container in said predetermined position when in said locking position.

43. (Currently amended) In a method of treating physiological fluids, the improvement comprising providing a container adapted to contain said fluids during treatment, wherein said container comprises a base forming a plurality of sterile chambers, each of said chambers having a bottom and a top, a bridge connecting top portions of at least two of said chambers and arranged to provide a sterile fluid channel from a first of said at least two sterile chambers to a second of said at least two sterile chambers when said container is in a predetermined orientation, a lid closing said top of each of said plurality of chambers, and an access port near the top of at least one of said chambers that allows sterile transfer of a liquid to or from said at least one of said chambers independently of the other of said chambers from the exterior of said container to the interior of said at least one of said chambers [access ports that provide access to the chambers while maintaining sterility], and placing a physiological fluid in one of said plurality of sterile chambers.